N.B.: This translation is for your convenience only. The original German "Studien- und Prüfungsordnung für den Studiengang Applied & Environmental Geoscience" remains the sole legally binding document.

University of Tübingen exam regulations for the study program in Applied & Environmental Geoscience culminating in an examination for a Master of Science (M.Sc.) degree

In accordance with §§ 19 (1)(2)(9), 32 (3) LGH (GBI. 2005, 1) as amended on 01.04.2014 (GBI. p. 99), the University of Tübingen Senate on 18.06.2015 passed these Special Provisions of the exam regulations for the study program in Applied & Environmental Geoscience at the University of Tübingen culminating in an examination for a Master of Science (M.Sc.) degree.

Approved by the President and Vice-Chancellor on 26.06.2015.

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§ 1 Validity of General Provisions

University of Tübingen exam regulations for the study program in Geoscience, Geoecology and **Applied & Environmental Geoscience** culminating in an examination for a Master of Science (M.Sc.) degree – General Provisions – as amended are part of these exam regulations, insofar as no other special provisions have been made.

I. Goals, contents and structure of the program

§ 2 Contents and goals, prescribed minimum period for completion, volume, and start date of program

(1) ¹The Master's program is a research-oriented program following on from a Bachelor's degree in the same field. ²In the Applied & Environmental Geoscience program students build upon the foundations and methodological knowledge obtained in an appropriate Bachelor's degree, developing advanced competence in the more specialized fields of Environmental Chemistry and Environmental Microbiology, Environmental Physics and Environmental Modeling, and Hydrogeology. ³In this Master's program, students must learn to analyze and

evaluate complex environmental problems on the basis of environmental-geoscientific and multidisciplinary approaches, in order to develop appropriate strategies to solve them.

(2) ¹The prescribed minimum period of study in the Applied & Environmental Geoscience Master's program is set out in § 1 (5) of the General Provisions of these exam regulations. ²A total of 120 credit points must be obtained to successfully complete this M.Sc. degree program. ³The start of the program (winter or summer semester) is set out in the regulations governing admission and enrollment at the University of Tübingen, as amended.

(3) ¹Prerequisite for the Master's program is a Bachelor's degree in one of the subjects of geology, geoecology, environmental science, geophysics, mineralogy, physical geography, soil science, mathematics, physics, chemistry, biology, computer science, civil engineering, or in a related subject with environmental relevance and a grade of 2.5 or better. ²The board of examiners will decide on the equivalency of a degree. ³The board of examiners may transfer the making of this decision revocably to the head of the board. If there is a set number for admission, the statutes may specify that the selection committee formed for the relevant selection process decides instead. ⁵The details may be set out in the selection statutes.

§ 3 Structure

(1) ¹The Applied & Environmental Geoscience Master's program is structured over two years. ²It concludes with the Master's examination.

(2) ¹Students complete a program of 120 credit points. The program consists of the following modules:

Recommend- ed semester	Module number	Module description	ECTS credits
Compulsory m	odules in Ap	oplied & Environmental Geoscience Master's program	·
1	M 201	Hydrogeology	6
1	M 203	Environmental Modeling 1	6
1	M 207	Aquatic & Environmental Chemistry	6
2	M 101	Scientific Practice 1	6
3	M 102	Scientific Practice 2	6
4	M 103	Scientific Presentation	6
3, 4	M 104	Master Thesis	30
Compulsory ele Specialization: H	lydrogeology	les in Applied & Environmental Geoscience Master's pro	gram
	M 202	Applied Hydrogeology	6
	M 205	Contaminant Hydrogeology	6
	M 214	Geotechnical Engineering	6
Specialisation: E	Environmenta	al Chemistry and Geomicrobiology	
	M 210	Environmental Microbiology and Geomicrobiology	6
	M 222	Hydrogeochemical Modeling	6
	M 218	Environmental Analytical Chemistry	6
Specialization: E	Invironmenta	al Physics and Environmental Modeling	
	M204	Environmental Modeling 2	6
	M 206	Case Studies in Environmental Geosciences	6
	M 216	Physics of the Atmospheric Boundary Layer	6

²Students must obtain 36 ECTS credits from compulsory modules listed in the table above as well as completing a Master's thesis of 30 ECTS credit points. ³The compulsory elective modules are worth 54 ECTS credits in total; you must study one of the fields listed in § 2(1)(2), which is composed of the three modules set out in the above table, depending on your chosen field of specialization. ⁴Further modules totalling 36 ECTS credits may be freely selected from the Master of Applied & Environmental Geoscience syllabus. ⁵Details of required electives may be found in the current module handbook. ⁶Other modules from the field of the examination board will decide. ⁷However, a maximum of two modules from Bachelor programs is permitted - and then only the modules which you did not yet complete in the course of a Bachelor program leading up to your Master's program.

II. Teaching of material

§ 4 Types of classes within the module

¹Classes of the following types in particular are scheduled:

- 1. Lectures
- 2. Seminars and colloquia
- 3. Exercises and practical experience, laboratory internships
- 4. Fieldwork, internships and excursions
- 5. Tutorials

²For classes which are not lectures, participant numbers may be limited under § 30(5)(1) Landeshochschulgesetz if training could not otherwise be guaranteed in accordance with the regulations or if a limitation is necessary for other reasons of research, teaching or patient care. ³Subject-related techniques in particular are to be taught in these classes along with interdisiplinary, professionally-oriented qualifications. ⁴In addition, students are to have the opportunity to work in small groups to develop the ability to present the knowledge obtained both verbally and in written form. ⁵In addition, the right to participate in classes may be restricted or admission to part of the course may be made dependent on the completion of certain coursework, if training could not otherwise be guaranteed in accordance with the regulations or a limitation is necessary for other reasons of research, teaching or patient care.

§ 5 Languages of instruction and examination

¹English is the language of instruction and examination in the Applied & Environmental Geoscience Master's degree program. ²An adequate knowledge of English is required (level B2 of the Common European Framework of Reference for Languages). ³You do not have to demonstrate an adequate knowledge of English if you: are a native speaker of English, have completed a degree at an English-language school or university or in an English-language study program, or if you can show an internationally-recognized test result of English language knowledge which is the equivalent of the "Test of English as a Foreign Language" with a minimum score of 213 in the computer-based test or 79 in the internet-based test. ⁴Classes and exams in the required elective modules may be held in German.

§ 6 Types of assessment

The assessed coursework required in each of the modules is set out in § 3 of the Special Provisions of these exam regulations and/or in the module handbook.

III. Organization of program

§ 7 Volume of material

The required volume of study arises from the General Provisions of the exam regulations, the structure of the program and the modules - particularly from § 3 of the Special Provisions of the exam regulations and/or the module handbook.

IV. Master's examination and overall grade

§ 8 Nature and execution of Master's examination

¹In addition to the prerequisites set out in the General Provisions of these exam regulations, a prerequisite for admission to the Master's thesis process and other possible oral examinations to be completed in the final phase of the program under § 15 of the General Provisions is the completion of course-related assessment of 54 ECTS credits. ²These 54 ECTS credit points must include the credits from the compulsory modules Aquatic & Environmental Chemistry, Environmental Modeling 1, Hydrogeology and Scientific Practice 1. ³Admission to the Master's thesis is allowed at the start of the second year of study at the earliest. ⁴The Master's thesis must be completed in one of the areas of specialization offered. ⁵It must be written in English.

§ 9 Master's thesis

Provisions governing the Master's thesis are set out in § 17 of the General Provisions of these exam regulations.

§ 10 Calculation of the overall grade

The overall grade of the Master's examination is calculated from the average (as weighted by credit points) of all grades given in the graded modules, taking account of the further provisions in § 21 of the General Provisions of these exam regulations.

V. Closing remarks

§ 11 Effective date and transitional arrangements

¹These exam regulations come into effect on the date of their publication in the University of Tübingen's official bulletin, the Amtliche Bekanntmachungen. ²Their first semester of validity is the winter semester 2015-16. ³Students who have commenced their Master's program prior to the semester named above may complete their Master's examination at the University of Tübingen under the new exam regulations upon written application. This application must reach the relevant examinations office in line with § 16(1)(1) of the General Provisions of these exam regulations. ⁴If no application is made according to to (3), the provisions of the previous exam regulations apply. ⁵Coursework and assessment completed to date will be accredited according to these exam regulations. ⁶These exam regulations do not grant any additional right to be examined; fails in assessed work under the previous exam regulations will be included.

Tübingen, 26.06.2015

Professor Dr. Bernd Engler President and Vice-Chancellor